UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/080,861	05/18/98	ENDO H	1272.6808CI/

005514 WM31/0116
FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK NY 10112

EXAMINER	
KIANNI,K	
ART UNIT	**PAPER NUMBER**
2624	9

DATE MAILED: 01/16/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)	
	09/080,861	ENDO ET AL.	
	Examiner	Art Unit	
	Kevin C Kianni	2724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 13-27 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

JEROME GRANT II
PRIMARY EXAMINER

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
18) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 15 and 23 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant does not disclose how the magnifying rate of the image to be printed on the printing medium based on the image data is a product of a **magnifying rate** shown by said first magnifying rate information multiplied by a magnifying rate shown by said second magnifying rate information.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 13-18 and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Moriya (US 4905096).

Regarding claim 13, Moriya teaches a printing system including an image processing section and a printing section to perform printing on a printing medium based on image data (see fig. 5; col. 4, lines 37-46), said system comprising: a memory for storing the image data (fig. 6, items 62 and 63; col. 5, line 21);
first processing means for executing image data magnifying processing based on first magnifying rate information (fig. 1; item p50; col. 6, lines 62-64); and
second processing means for executing the image data magnifying processing for an image to be printed based on the image data magnified by said first processing means (fig. 2, item p60; col. 7, lines 18-20), based on second magnifying rate information (col. 7, lines 1-8), wherein said first magnifying rate information is determined based on at least one of a resolution of printing performed by said printing section (see col. 6, lines 54-61; and col. 4, lines 41-42), a processing load to be borne by said first processing means (see col. 4, lines 37-54; and col. 6, lines 54-61), a capacity of said memory and a resolution shown by the image data (see col. 5, lines 47-54), and a magnifying rate of the image to be printed on the printing medium based on the image data (see col. 4, lines 37-54; and col. 6, lines 54-61).

Regarding claim 14, Moriya further teaches wherein said second magnifying rate information is determined based on said first magnifying rate information and the magnifying rate of the image to be printed on the printing medium based on the image data (see col. 6, lines 46-68; and col. 7, lines 18-20).

Regarding claim 15, Moriya further teaches wherein the magnifying rate of the image to be printed on the printing medium based on the image data is a product of a magnifying rate shown by said first magnifying rate information multiplied by a magnifying rate shown by said second magnifying rate information (see fig. 8, items a-d; col. 5, lines 55-64; and col. 7, lines 45-60).

Regarding claim 16, Moriya further teaches wherein said memory is provided in the printing section to store the image data magnified by said first processing means (see col. 5, lines 15-26; col. 4, lines 38-47; and col. 5, lines 1-3).

Regarding claim 17, Moriya further teaches wherein said second processing means is provided in the printing section (fig. 2, item p60; col. 7, lines 18-20).

Regarding claim 18, Moriya further teaches the printing section having a printing apparatus using a printing head to perform printing on the printing medium and the image processing section having an apparatus outputting the image data to the printing apparatus (see fig. 5, item 48; col. 5, lines 1-3).

Regarding claim 21, Moriya teaches a printing method of performing printing on a printing medium by means of a printing section, based on image (see fig. 5; col. 4, lines 37-46) data , said method comprising the steps of:

executing image data magnifying processing based on first magnifying rate information (fig. 1; item p50; col. 6, lines 62-64); and performing printing an image obtained by executing magnifying processing for the image data magnified by said executing magnifying step (see col. 6, lines 54-61; and col. 4, lines 41-42), based on second magnifying rate information (fig. 2, item p60; col. 7, lines 18-20), wherein said first magnifying rate information is determined based on at least one of a resolution of printing performed by said printing section (fig. 1; item p50; col. 6, lines 62-64), a processing load to be borne by said first processing means (see col. 4, lines 37-54; and col. 6, lines 54-61), a capacity of a memory for storing the image data and a resolution shown by the image data (see col. 5, lines 47-54), and a magnifying rate of the image to be printed on the printing medium based on the image data (see col. 4, lines 37-54; and col. 6, lines 54-61).

Regarding claim 22, Moriya further teaches wherein said second magnifying rate information is determined based on said first magnifying rate information and the magnifying rate of the image to be printed on the printing medium based on the image data (see col. 6, lines 46-68; and col. 7, lines 18-20).

Regarding claim 23, Moriya further teaches wherein the magnifying rate of the image to be printed on the printing medium based on the image data is a product of a

magnifying rate shown by said first magnifying rate information multiplied by a magnifying rate shown by said second magnifying rate information (see fig. 8, items a-d; col. 5, lines 55-64; and col. 7, lines 45-60).

Regarding claim 24, Moriya further teaches wherein said memory is provided in the printing section to store the image data magnified by said first processing means (see col. 5, lines 15-26; col. 4, lines 38-47; and col. 5, lines 1-3).

Regarding claim 25, Moriya further teaches the printing section having a printing apparatus using a printing head to perform printing on the printing medium and the image processing section having an apparatus outputting the image data to the printing apparatus (see fig. 5, item 48; col. 5, lines 1-3).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 19-20 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriya as applied to claims 13-18 above, and further in view of Ikeda et al. (US 5034806).

Regarding claims 19-20 and 26-27, Moriya teaches a printing system including an image processing section and a printing section to perform printing on a printing medium based on image data (see fig. 5; col. 4, lines 1-3 and 37-46).

However, Moriya does not teach this system that includes wherein the printing head is an ink jet head ejecting ink onto the printing medium and wherein the ink jet head has electro-thermal converting element applying thermal energy to ink to eject the ink by utilizing the thermal energy.

Ikeda teaches a printing system with image magnification processing (see fig. 3b, item 85; c. 3, lines 19-28) wherein the printing head is an ink jet head ejecting ink onto the printing medium and wherein the ink jet head has electro-thermal converting element applying thermal energy to ink to eject the ink by utilizing the thermal energy (col. 9, lines 58-63).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Moriya's printing system circuitry 48, with that of Ikeda's printing system 15, in order to achieve a printing system wherein the printing head is an ink jet head ejecting ink onto the printing medium; since this would yield a conventional printing system that magnifies input images and outputs color prints through ink jet head in relatively fast paste printing process. And because both printing systems of Moriya and Ikeda are essentially compatible in which both can read input images and perform printing processing through magnification process.

Response to Amendment

6. Applicant's arguments filed on October 28, 2000 have been fully considered but they are not persuasive.

With respect to claims 15 and 23 which was rejected under 35 USC § 112, applicant alleges (page 2, 1st parag.-page 4, 2nd parag.) that the claimed invention discloses the limitations of claims 15 or 23 without providing any convincing proof on how **magnifying rate** shown by said first magnifying rate information multiplied by a magnifying rate shown by said second magnifying rate information is disclosed/taught in specification. Applicant's references to specification segments such as to page 21, lines 17 to 23, or page 27, lines 1-18 or page 31, lines 1-3 cites description of magnification rate without showing any teaching regarding the above underlined claimed limitation.

Applicant alleges (pages 5, 2nd parag-page 7, 2nd parag.) that neither Moriya or Ikeda does not teach "first processing means for executing image data magnifying processing based on first magnifying rate information and second processing means for executing the image data magnifying processing for an image to be printed based on the image data magnified by said first processing means based on second magnifying rate information wherein said first magnifying rate information is determined based on at least one of a resolution of printing performed by said printing section a processing load to be borne by said first processing means a capacity of said memory and a resolution shown by the image data and a magnifying rate of the image to be printed on the printing medium based on the image data". The examiner submits that Moriya teaches a

printing system, including an image processing section that first processing means for executing image data magnifying processing based on first magnifying rate information (fig. 1; item p50; col. 6, lines 62-64), and second processing means for executing the image data magnifying processing for an image to be printed based on the image data magnified by said first processing means (fig. 2, item p60; col. 7, lines 18-20), based on second magnifying rate information (col. 7, lines 1-8), wherein said first magnifying rate information is determined based on at least one of a resolution of printing performed by said printing section (see col. 6, lines 54-61; and col. 4, lines 41-42), a processing load to be borne by said first processing means (see col. 4, lines 37-54; and col. 6, lines 54-61), a capacity of said memory and a resolution shown by the image data (see col. 5, lines 47-54), and a magnifying rate of the image to be printed on the printing medium based on the image data (see col. 4, lines 37-54; and col. 6, lines 54-61).

In page 7 (2nd parag.) applicant admits that Ikeda teaches enlargement /reduction of images but he does not provide detailed explanation why the reference fails to teach the features and why Ikeda'a teaching can not be combined with Moriya wherein both printing systems of Moriya and Ikeda are essentially compatible in which both can read images and perform printing processing through magnification process and output the results through printing process.

THIS ACTION IS MADE FINAL

1. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin C. Kianni whose telephone number is (703) 308-1216. The examiner can normally be reached on 8:30-18.00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (703) 308-7452. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 308-9051.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-3900.

JEROME GRANT II
PRIMARY EXAMINER

Kevin C. Kianni
Examiner: Kianni
Art Unit 2624

January 8, 2001